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Received - 2021-09-09 02:18:02 PM
Control Number - 52373
ItemNumber - 97

PROJECT NO. 52373

**REVIEW OF WHOLESALE
ELECTRIC MARKET DESIGN**

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**PUBLIC UTILITY COMMISSION

OF TEXAS**

**EXECUTIVE SUMMARY FOR TCPA COMMENTS DEMAND RESPONSE
QUESTIONS**

- Demand response and load management programs, and their deployment for short-term reliability, should not erode long-term reliability by reducing the prices needed to signal invest in existing and new generation resources.
- These reliability actions must be reflected in pricing. Otherwise, the load management programs are out-of-market actions that just put downward pressure on prices and send signals that capital investment is not needed in ERCOT.
- Pre-deployment of load resources that receive ERS or Load Management Payments should be prohibited.
- The Commission should consider the market impacts of ERS resources under 10MW that don't participate in SCED. These resources are not truly a load response but a generation resource that is receiving a capacity payment while also benefitting from the energy-only market, providing an unfair advantage to these resources over conventional generation.
- TCPA recommends the Commission ensure that demand response products and programs, deployed for reliability, are reflected in the RDPA and ORDC pricing.
- Load-side products receiving compensation for serving a reliability need should show up when needed in a manner commensurate to their compensation structure. If such a reliability product fails to reduce load when deployed, the payment should be recovered from the provider.
- Changing the trigger for when reliability programs are deployed by ERCOT or TDUs to allow their deployment outside of Emergency Energy Alert (EEA) 2 should also be accounted for with instructed capacity to be included in both deployment and recall periods in the Reliability Deployment Price Adder (RDPA) as well as ORDC calculations in order to prevent these actions from reducing energy prices in a way that harms investment by undermining market design changes intended to signal new investment is needed.

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**PUBLIC UTILITY COMMISSION

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TCPA RESPONSE TO STAFF QUESTIONS ON DEMAND RESPONSE

Texas Competitive Power Advocates (TCPA) is a trade association representing power generation companies and wholesale power marketers with investments in Texas and the Electric Reliability Council of Texas (ERCOT) wholesale electric market. TCPA members¹ and their affiliates provide a wide range of important market functions and services in ERCOT, including development, operation, and management of power generation assets, power scheduling and marketing, energy management services and sales of competitive electric service to consumers. TCPA members provide almost ninety percent (90%) of the non-wind electric generating capacity in ERCOT. TCPA members have invested billions of dollars in the state and employ thousands of Texans.

TCPA appreciates the opportunity to provide these initial responses to the PUCT's demand response questions filed on September 2, 2021. The association and its member companies may not provide comments to all of the questions posed at this time but may have additional comments as the concepts are further discussed. Our intent is to provide the wholesale market perspective in the context of overall market design with the intent to provide a reliable grid as well as revenues that will drive investments in new and existing dispatchable, reliable generation resources.

TCPA believes that demand response programs provide another mechanism for managing grid reliability. The Commission should differentiate voluntary price responsive demand from paid demand response in which loads are instructed to curtail in exchange for a capacity payment. The existence of these programs and any deployment instruction from ERCOT to prevent grid emergencies should not erode long-term reliability by reducing the prices needed to

¹ TCPA member companies participating in these comments include: Calpine, Cogentrix, EDF Trading North America, Exelon, Luminant, NRG, Shell Energy North America, Talen Energy, Tenaska, TexGen Power, and WattBridge.

signal investment in existing and new generation resources. Demand response programs deployed by ERCOT or a transmission and distribution utility (TDU) are not price-responsive programs; in contrast, these programs are deployed for reliability and can occur prior to the high prices that trigger voluntary load reduction in response to pricing. As a result, existing ERCOT and TDU demand response programs will have a price-suppressive component that may exacerbate long-term resource adequacy if that out-of-market impact is not addressed in market prices.

STAFF QUESTIONS

1. Describe existing and potential mechanisms for residential demand response in the ERCOT market.

a. Are consumers being compensated (in cash, credit, rebates, etc.) for their demand response efforts in any existing programs today, and if not, what kind of program would establish the most reliable and responsive residential demand response?

b. Do existing market mechanisms (e.g., financial cost of procuring real time energy in periods of scarcity) provide adequate incentives for residential load serving entities to establish demand response programs? If not, what changes should the Commission consider?

TCPA has no comment at this time.

2. What market design elements are required to ensure reliability of residential demand response programs?

a. What command/control and reporting mechanisms need to be in place to ensure residential demand response is committed for the purpose of a current operating plan (COP)?

b. Typically, how many days in advance can residential demand response commit to being available?

TCPA has no comment at this time.

3. How should utilities' existing programs, such as those designed pursuant to 16 TAC §25.181, be modified to provide additional reliability benefits?

a. What current impediments or obstacles prevent these programs from reaching their full potential?

TCPA encourages the Commission to put administrative load reduction programs in the context of the real-time market and its importance to price formation, future investment, and

overall long-term reliability. Load reduction programs, whether through a TDU load management program or Emergency Response Service (ERS), are not price-responsive but based solely on grid reliability. Therefore, these “but for” reliability actions must be reflected in pricing. Otherwise, these are out-of-market actions will artificially suppress prices and impede investment signals in ERCOT. As the 2017 Hogan Report states about fundamentals of energy-only market design:

A key requirement is for an efficient real-time market design, which is important in its own right, and also because the expected prices in the real-time market provide the basis for investment and contractual decisions, in forward time periods. Market participants will anticipate real-time conditions and make forward decisions, such as investing in new plants or signing contracts for future delivery, which recognize the market determinants of real-time prices and associated settlement payments. A well-functioning real-time market will encourage efficiency in investments and other business arrangements in forward markets... A good real-time market design with efficient prices should be the first focus of an organized wholesale electricity market.²

According to the 2018 Independent Market Monitor (IMM) State of the Market Report, “The reliability adder reflects the incremental costs of reliability actions taken by ERCOT, including reliability unit commitments (RUC) and deployed load capacity.”³ A policy decision to allow ERCOT or TDU instructed deployment should also be accounted for with instructed capacity to be included in the deployment and recall periods in the Reliability Deployment Price Adder (RDPA) and for those deployments to be reflected in ORDC calculations as well. Moreover, the terms of the ERS and Load Management products should be strengthened to eliminate “pre-deployment” of paid demand response capacity. The inclusion of these market design changes are essential to prevent these actions from reducing energy prices in a way that harms investment by undermining market design changes intended to signal new investment is needed.

4. Outside of the programs contemplated in Question 3, what business models currently exist that provide residential demand response?

a. What impediments or obstacles in the current market design or rules prevent these types of business models from increasing demand response and reliability?

² “Priorities for the Evolution of an Energy-Only Electricity Market Design in ERCOT” by William W. Hogan & Susan L. Pope, Harvard University and FTI Consulting, Inc. May 9, 2017 at page 5. [47199_2_941113.PDF \(texas.gov\)](#)

³ “2018 STATE OF THE MARKET REPORT FOR THE ERCOT ELECTRICITY MARKETS” by Potomac Economic. June 2019. [Microsoft Word - 2018 State of the Market Report_FINAL \(texas.gov\)](#)

The Commission considered demand response in 2012 as part of Project 40000. Input from The Demand Response Coalition opined, “Even if all of these obstacles are overcome, it will be challenging to provide customers with sufficient incentives to respond to price signals in an energy only market design, unless customers are provided with an LMP payment for their curtailments. In order to participate, a customer must maintain a "readiness" capability to respond. In contrast, capacity-based markets are more conducive to demand response since the capacity market provides a stable source of market-based "readiness" revenue in addition to the energy only market design payment.”⁴ In other electricity markets around the country that employ capacity markets, aggregation of demand response is allowed and those resources compete against generation and are required to bid in. The Demand Response Coalition comments go on to quote from a Brattle Report:

“the Brattle Report suggests that RTOs like PJM and New England have developed significant customer participation by adopting capacity payment models: In the Eastern RTOs, CSPs have developed the majority of new DR by selling aggregated emergency call options into capacity markets. The CSPs there depend on capacity payments to provide a revenue stream even in years without emergencies. A pure energy-only market with very high price caps may be less conducive to CSP participation if they cannot sell capacity. They can only sell energy, and only if the RTO allows their load reductions to be counted as supply, as contemplated in some ERCOT and stakeholder proposals. Even that might not attract CSPs if they can earn revenues only in the rare event that high scarcity pricing occurs.”⁵

TCPA urges caution in integrating demand response programs for reliability purposes into the ERCOT market that further impacts investment in conventional generation. Additional transparency about the quantity and deployment expectations for such resources would better allow the market to reflect the impact of these resources, though.

5. What changes should be made to non-residential load-side products, programs, or what programs should be developed to support reliability in the future?

Regardless of the policy decisions made regarding load-side products and programs, TCPA strongly believes the Commission must ensure that these administrative products and programs deployed for reliability are incorporated in the RDPA and ORDC to reflect the economic value of avoiding grid emergencies. Reliability demand response programs constitute out-of-market

⁴ Texas Demand Response Coalition’s Comments, Project 40000, at page 9. [40000_186_732185.PDF \(texas.gov\)](#)

⁵ Texas Demand Response Coalition’s Comments, Project 40000, at page 19. [40000_186_732185.PDF \(texas.gov\)](#)

reliability actions and need to be treated as such. It is crucial that load-side products receiving compensation for serving a reliability need be required to respond when needed in a manner commensurate to the compensation structure. These requirements should apply to residential as well as any business entity aggregated to provide a load reliability product. If such a reliability product fails to reduce load when deployed, the payment should be recovered from the provider. As a result, TCPA recommends the Commission include such a requirement and a corresponding recovery mechanism in its rules and ERCOT protocols.

TCPA also recommends the Commission review the market impacts of resources in ERS under 10MW that do not participate in SCED. These resources are essentially allowed to finance generation through a behind-the-meter capacity payment that is not available to all types of generation. These resources are not truly a load response but a generation resource that is receiving a capacity payment while also benefitting from the energy-only market. This provides an unfair advantage to these resources over conventional generation and creates an additional barrier to investment by traditional resource owners.

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TCPA appreciates the opportunity to provide input on these important market design issues and looks forward to participating in work sessions and future discussions on market design changes.

Dated: September 16, 2021

Respectfully submitted,

A handwritten signature in black ink, reading "Michele Richmond". The signature is fluid and cursive, with the first name "Michele" and last name "Richmond" clearly distinguishable.

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